## ABSTRACT OF THE DISCLOSURE

A method of fabricating a semiconductor device includes: forming an interlayer insulating film on a semiconductor element; forming a polysilicon layer on the interlayer insulating film, implanting dopant atoms into the polysilicon layer; forming a second resist layer on the polysilicon layer; forming one or more first openings in the second resist layer; etching the polysilicon layer using the second resist layer as a first mask, thereby forming one or more second openings in the polysilicon layer; and forming one or more contact holes in the interlayer insulating film using at least the polysilicon layer as a second mask.